



Commercial
Airplanes

737

Service Bulletin

ALERT

Number: 737-53A1251
Original Issue: June 03, 2004
Revision 2: January 20, 2021
ATA System: 5311

SUBJECT: FUSELAGE - Frames and Bulkheads - Body Station 1016 Aft Pressure Bulkhead -
Apex Inspection

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Revision Transmittal Sheet

SUBJECT: FUSELAGE - Frames and Bulkheads - Body Station 1016 Aft Pressure Bulkhead -
Apex Inspection

This revision includes all pages of the service bulletin.

COMPLIANCE INFORMATION RELATED TO THIS REVISION

Federal Aviation Administration (FAA) Airworthiness Directive AD 2005-05-18 is related to this service bulletin. The effective date of AD 2005-05-18 is April 18, 2005.

Federal Aviation Administration (FAA) Airworthiness Directive AD 2013-19-23 is related to this service bulletin. The effective date of AD 2013-19-23 is November 7, 2013.

Federal Aviation Administration (FAA) Airworthiness Directive AD 2017-10-22 is related to this service bulletin. The effective date of AD 2017-10-22 is June 27, 2017.

The Federal Aviation Administration (FAA) will possibly release an additional Airworthiness Directive related to this service bulletin. The Airworthiness Directive will make the compliance tasks and times given in this service bulletin mandatory.

Effects of this Revision on airplanes on which Original Issue and Revision 1 was previously done:

None.

REASON FOR REVISION

This revision is sent to update Group 1 compliance time and for Group 1 removed GVI for any repair.

These sections were changed:

1. In Summary and 1.D Description, updated Group 1 Actions.
2. In Paragraph 1.E., Compliance, updated compliance tables 1 and 2.
3. In 1.G Manpower, removed figure 2 for Group 1.
4. In Paragraph 3.B.2, Work Instructions, updated to match compliance tables 1 and 2.
5. Figure 2, was deleted.

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6. APPENDIX A and B, updated logic diagrams for compliance tables 1 and 2.

Vertical lines are put on the left edge of each page, except in Paragraph 1.A., Effectivity and format changes, to show the location of all content changes.

Pages with no vertical lines have no changes.

REVISION HISTORY

Original Issue:	June 03, 2004
Revision 1:	September 22, 2020
Revision 2:	January 20, 2021



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Number: 737-53A1251
Original Issue: June 03, 2004
Revision 2: January 20, 2021
ATA System: 5311

Summary

SUBJECT: FUSELAGE - Frames and Bulkheads - Body Station 1016 Aft Pressure Bulkhead -
Apex Inspection

THIS DOCUMENT IS SENT TO THE OPERATORS OF RECORD OF THE AIRPLANES SHOWN IN PARAGRAPH 1.A., EFFECTIVITY. IF AN AIRPLANE HAS BEEN LEASED OR SOLD, SEND THIS DOCUMENT TO THE NEW OPERATOR. IF APPLICABLE SPARES HAVE BEEN SOLD, SEND THIS DOCUMENT TO THE NEW OWNER.

CONCURRENT REQUIREMENTS

None.

BACKGROUND

Accomplishment of the inspections in this Service Bulletin will detect the propagation of cracks from fastener holes in the web lap splices at Station (STA) 1016 Aft Pressure Bulkhead (APB) center dome apex. If the work given in this service bulletin is not accomplished, multiple cracks in the APB gore webs of the center dome apex could go undetected. Cracks in the webs may result in the inability of the APB to sustain limit loads and result in rapid decompression of the fuselage.

During cycle tests of the Boeing 737-800 Fatigue Test Article, cracks were found in the APB web lap splices common to the apex of the pressure dome. The cracks occurred at several of the fastener rows located in the aft web at the lap splice area. The cracks were in the fastener rows located adjacent to the area where the web transitions aft over the forward web in the lap splice. The pull down loading caused by the single rivet located in the areas where each of the webs transitions up 0.032 inches over the adjacent web causes cracks to start on the lap rivet holes. Cracks were found in three of the seven webs. Additional cracks have been found at the single fastener locations between lap splices on 737 classic airplanes.

For Group 2, while performing High Frequency Eddy Current (HFEC) inspections of the APB web lap splice per Service Bulletin 737-53A1353, five cracks common to the gore webs of the center dome apex were found. At one location, the crack was linked from the first to the second fastener row. The current Service Bulletin 737-53A1353 and Maintenance Planning Data (MPD) do not provide adequate inspections for the subject cracks.

Operators should note only affected airplanes line numbers 1 through 1755 have a 0.032 inch web thickness. Airplanes line numbers 1 to 1166 have a different fastener pattern than line numbers 1167 to 1755. The fasteners in the apex dome region are subjected to fuselage pressurization fatigue cycles and clamp-up stresses during the assembly process. Airplanes after line number 1755 have a web thickness 0.040 inch.

Boeing Service Related Problem (SRP) 737NG-SRP-53-0608 is related to this service bulletin.

BOEING SERVICE BULLETIN 737-53A1251**ALERT****ALERT**

Boeing Fleet Team Digest (FTD) 737NG FTD 53-19005 is related to this service bulletin.

This table is provided to operators for planning purposes only. Refer to the applicable sections for more information.

Planning Data	Affected	Reference
Spares Affected	No	Paragraph 1.A.2., Spares Affected
AD Related	Yes	Paragraph 1.E., Compliance and Paragraph 1.F., Approval
Weight and Balance Change	No	Paragraph 1.H., Weight and Balance Changes
Electrical Load Changed	No	Paragraph 1.I., Electrical Load Data
Publications Affected	No	Paragraph 1.K., Publications Affected
Airplane Flight Operations Affected (Flight Crew Operations Manual and/or FAA Approved Airplane Flight Manual)	No	Paragraph 1.K., Publications Affected
Kits/Parts Required	No	Paragraph 2.C.1., Kits/Parts
Operator Supplied Parts/Material	No	Paragraph 2.C.2., Parts and Materials Supplied by the Operator
Special Tooling Required	No	Paragraph 2.F., Special Tooling Necessary to do this Service Bulletin

ACTION (PRR 39800-023RS)**Group 1:**

Do a Detailed Inspection and a HFEC Inspection around the web fasteners for any crack. Do a LFEC Inspection around the hidden web lap splice fastener locations for any crack. If no crack is found, continue to do the repeat Detailed Inspection, HFEC Inspection and LFEC Inspection, at the times specified in the compliance section of this service bulletin. If any crack is found, contact The Boeing Company for repair instructions and do the repair.

Group 2:

Get access to the aft side of the Aft Pressure Bulkhead (APB). Do a General Visual Inspection for any repair. If any repair found contact The Boeing Company for alternative inspection(s) to this Service Bulletin, and do the inspection(s) and applicable on-condition action(s). Do a Detailed Inspection and a High Frequency Eddy Current (HFEC) Inspection around the web fasteners for any crack in the unrepaired areas. Do a Low Frequency Eddy Current (LFEC) Inspection around the hidden web lap splice fastener locations for any crack in the unrepaired areas. If no repair is found, do a Detailed inspection, HFEC inspection and LFEC inspection of the Station (STA) 1016 Aft Pressure Bulkhead (APB) center dome apex gore webs including the web edges, lap splices and outside lap splices for any crack. If any crack is found, contact The Boeing Company for repair instructions and do the repair and repeat the Detailed, HFEC, LFEC Inspections of the STA 1016 APB center dome apex gore webs for any crack. If no crack is found, repeat the Detailed, HFEC, LFEC Inspections of the STA 1016 APB center dome apex gore webs for any crack.

EFFECTIVITY

737-600/-700/-700C/-800/-900 Airplane(s). Refer to Paragraph 1.A.1., Airplanes, for the list of affected airplane(s).

ALERT**ALERT****COMPLIANCE**

Federal Aviation Administration (FAA) Airworthiness Directive AD 2005-05-18 is related to this service bulletin. The effective date of AD 2005-05-18 is April 18, 2005.

Federal Aviation Administration (FAA) Airworthiness Directive AD 2013-19-23 is related to this service bulletin. The effective date of AD 2013-19-23 is November 7, 2013.

Federal Aviation Administration (FAA) Airworthiness Directive AD 2017-10-22 is related to this service bulletin. The effective date of AD 2017-10-22 is June 27, 2017.

The Federal Aviation Administration (FAA) will possibly release an additional Airworthiness Directive related to this service bulletin. The Airworthiness Directive will make the compliance tasks and times given in this service bulletin mandatory.

Refer to Paragraph 1.E., Compliance.

INDUSTRY SUPPORT INFORMATION

Boeing warranty remedies are not available for the inspections given in this service bulletin.

MANPOWER

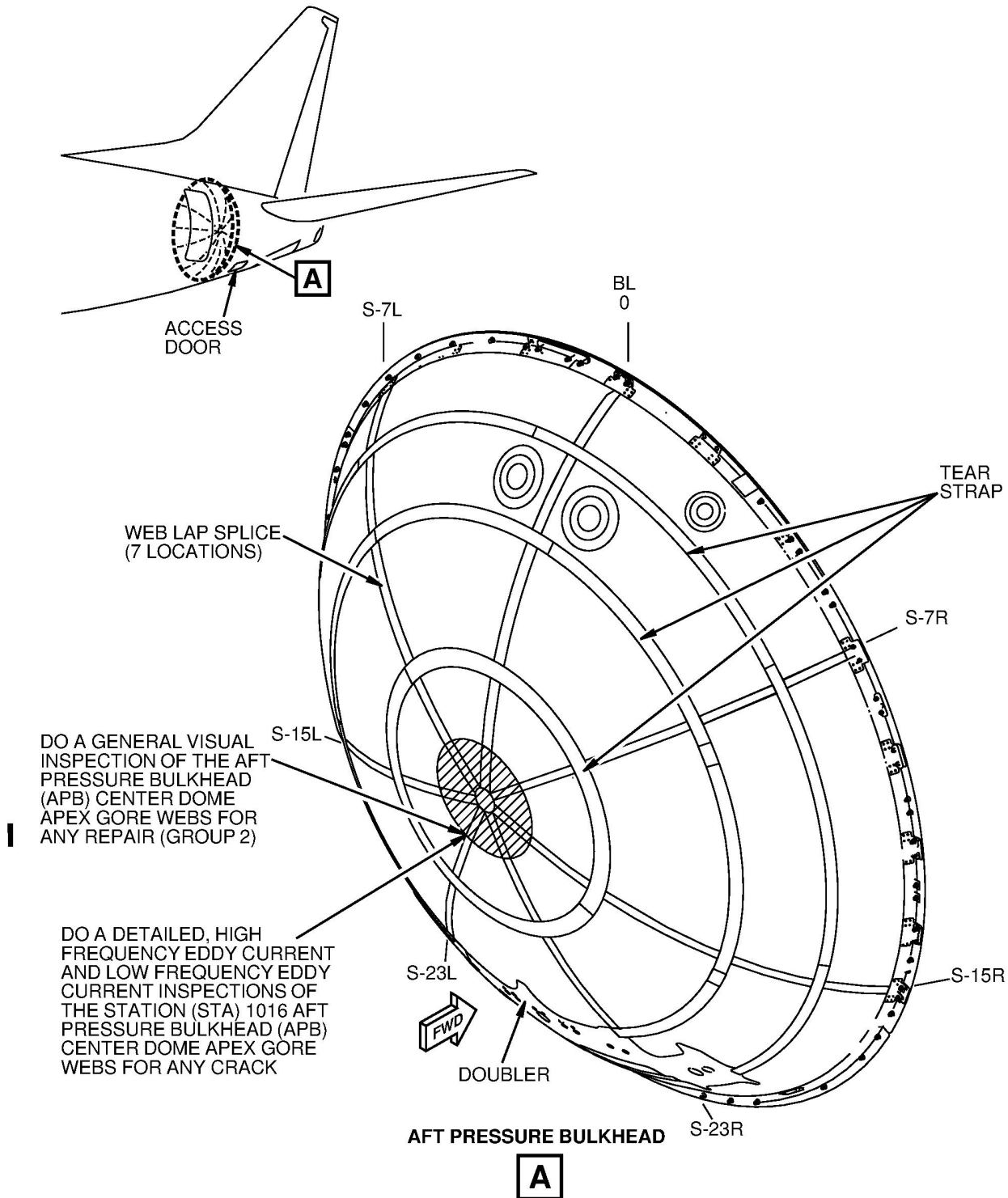
Refer to Paragraph 1.G., Manpower.

MATERIAL INFORMATION

None.

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SUBJECT: FUSELAGE - Frames and Bulkheads - Body Station 1016 Aft Pressure Bulkhead - Apex Inspection

THIS DOCUMENT IS SENT TO THE OPERATORS OF RECORD OF THE AIRPLANES SHOWN IN PARAGRAPH 1.A., EFFECTIVITY. IF AN AIRPLANE HAS BEEN LEASED OR SOLD, SEND THIS DOCUMENT TO THE NEW OPERATOR. IF APPLICABLE SPARES HAVE BEEN SOLD, SEND THIS DOCUMENT TO THE NEW OWNER.

1. PLANNING INFORMATION

A. Effectivity

1. Airplanes
Refer to Service Bulletin Index D6-19567 Part 3 for Airplane Variable Number, Line Number, and Serial Number data.

This bulletin is applicable to 737-600, 737-700, 737-700C, 737-800, 737-900 Airplane(s), line number(s) 1-1755 in 2 Group(s). Where the effectivity is presented with hyphens between line numbers, the airplane applicability means "through" and "inclusive", e.g. line numbers 1-9 means line numbers 1 through 9 inclusive.

The Variable Numbers and Group Information for the applicable airplanes is given below.

GROUP	CONFIGURATION	DESCRIPTION
1	-	All 737-600, -700, -700C, -800, -900 airplanes line numbers 1 through 1166.
2	-	All 737-600, -700, -700C, -800, -900 airplanes line numbers 1167 through 1755.

Airplane Models:

737-600, 737-700, 737-700C, 737-800, 737-900

Variable Number	Group
YA001 - YA099	1

Variable Number	Group
YA101 - YA124	1

Variable Number	Group
YA125 - YA199	2

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Variable Number	Group
YA201 - YA211	1
YA221	2
YA231 - YA242	1
YA251 - YA256	1
YA271 - YA272	1
YA291	1
YA301 - YA302	1
YA311 - YA314	1
YA321 - YA323	1
YA336 - YA343	1
YA344 - YA345	2
YA351	1
YA356 - YA357	1
YA366 - YA367	1
YA371 - YA377	2
YA501 - YA536	1
YA541 - YA552	1
YA571 - YA578	1
YA601 - YA615	1
YA621 - YA622	1
YA626 - YA629	1
YA630 - YA631	2
YA635 - YA636	1
YA641 - YA642	2
YA645 - YA647	1
YA648 - YA650	2
YA656 - YA659	1
YA666 - YA667	2
YA671 - YA672	1
YA681 - YA691	1
YA701 - YA706	1
YA707 - YA710	2
YA721 - YA722	1

Variable Number	Group
YA731 - YA734	1
YA751 - YA756	1
YA801 - YA803	1
YA809	1
YA811 - YA814	1
YA831 - YA834	1
YA835	2
YA841 - YA856	1
YA857 - YA862	2
YA881 - YA882	1
YA891 - YA892	1
YA961 - YA967	1
YA968 - YA976	2
YB001 - YB006	1
YB101 - YB116	1
YB117 - YB132	2
YB151 - YB153	1
YB156 - YB157	2
YB161 - YB162	1
YB163 - YB164	2
YB171 - YB172	1
YB181 - YB183	1
YB184	2
YB201 - YB207	1
YB208	2
YB271	1
YB276	1
YB301 - YB306	1
YB307 - YB310	2
YB371 - YB381	2
YB501 - YB502	1
YB521	1
YB522 - YB526	2

Variable Number	Group
YB541 - YB544	2
YB551	1
YB561 - YB574	2
YB576 - YB577	2
YB581 - YB587	2
YB601 - YB632	2
YB651	2
YB656	2
YB851 - YB863	2
YB871 - YB873	2
YB881 - YB888	2
YB901 - YB903	2
YB911	2
YC001 - YC030	1
YC051 - YC082	1
YC083	2
YC091 - YC094	1
YC101 - YC104	1
YC111 - YC113	1
YC121	1
YC126 - YC127	1
YC136 - YC141	1
YC146 - YC147	1
YC151 - YC156	1
YC166 - YC168	1
YC169 - YC170	2
YC171	1
YC176	1
YC177 - YC178	2
YC186 - YC189	2
YC201 - YC203	2
YC206 - YC207	2
YC301 - YC304	1

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Variable Number	Group
YC305	2
YC321 - YC383	1
YC384 - YC386	2
YC391 - YC392	1
YC393 - YC394	2
YC396	1
YC401 - YC417	1
YC421 - YC422	1
YC426 - YC428	1
YC436 - YC437	1
YC441 - YC448	1
YC451 - YC455	1
YC459	1
YC461 - YC467	1
YC471 - YC491	1
YC492 - YC499	2
YC501 - YC526	1
YC571 - YC581	1
YC582 - YC583	2
YC587 - YC589	1
YC591 - YC593	1
YC601 - YC655	1
YC681 - YC696	1
YC701 - YC715	1
YC720 - YC725	1
YC727 - YC739	1
YC740 - YC741	2
YC751 - YC752	1
YC761 - YC770	1
YC781 - YC793	1
YC801 - YC888	1
YC889 - YC892	2
YC901 - YC907	1

Variable Number	Group
YC921	1
YC922	2
YC931 - YC932	1
YC941 - YC949	1
YC950 - YC951	2
YC971 - YC976	1
YC977 - YC978	2
YC981 - YC983	1
YD001 - YD006	1
YD007	2
YD021 - YD025	1
YD041 - YD054	1
YD055 - YD057	2
YD081 - YD084	1
YD101 - YD107	1
YD108	2
YD121 - YD126	1
YD151 - YD153	1
YD154 - YD159	2
YD171 - YD172	1
YD201 - YD203	1
YD206 - YD208	1
YD209	2
YD216	1
YD217 - YD219	2
YD251 - YD253	1
YD254	2
YD256 - YD257	2
YD261	2
YD301 - YD324	1
YD325 - YD334	2
YD391	1
YD401 - YD409	1

Variable Number	Group
YD410	2
YD412	2
YD481 - YD485	2
YD491	2
YD501 - YD506	1
YD507 - YD512	2
YD531 - YD534	1
YD535	2
YD541 - YD544	1
YD545 - YD547	2
YD561 - YD564	2
YD571 - YD572	2
YD591 - YD595	2
YD601 - YD612	1
YD651 - YD653	2
YE001 - YE020	1
YE051	1
YE101 - YE109	1
YE151 - YE157	1
YE171 - YE172	1
YE201 - YE203	1
YE204 - YE206	2
YE301 - YE305	1
YE321 - YE326	2
YG001 - YG043	1
YG044	2
YG061 - YG064	1
YG066 - YG084	1
YG085 - YG089	2
YG091	2
YG201	2
YG211	2
YG501 - YG505	1

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Variable Number	Group
YG506 - YG508	2
YG601 - YG602	1
YJ001 - YJ004	2
YJ011 - YJ013	2
YJ021	2
YJ471 - YJ476	1
YJ477 - YJ480	2
YJ501 - YJ517	1
YJ531 - YJ546	2
YJ591 - YJ594	2
YJ631 - YJ632	1
YJ671 - YJ682	2
YJ801 - YJ853	2
YJ861 - YJ867	2
YJ871	2

Variable Number	Group
YJ901 - YJ902	2
YJ911 - YJ923	2
YJ931 - YJ936	2
YJ941 - YJ943	2
YK001 - YK007	2
YK101 - YK104	2
YK111 - YK112	2
YK121 - YK122	2
YK131 - YK132	2
YK136 - YK137	2
YK301 - YK304	2
YK321 - YK330	2
YK361 - YK366	2
YK401 - YK406	2
YK426 - YK427	2

Variable Number	Group
YK431 - YK432	2
YK456 - YK460	2
YK480 - YK484	2
YK511 - YK512	2
YK601	2
YM101 - YM103	2
YM201 - YM204	2
YM251 - YM267	2
YM471	2
YM481 - YM482	2
YM521	2
YM541	2
YM551	2
-	-
-	-

2. Spares Affected
None.

B. Concurrent Requirements

None.

C. Reason

Accomplishment of the inspections in this Service Bulletin will detect the propagation of cracks from fastener holes in the web lap splices at Station (STA) 1016 Aft Pressure Bulkhead (APB) center dome apex. If the work given in this service bulletin is not accomplished, multiple cracks in the APB gore webs of the center dome apex could go undetected. Cracks in the web may result in the inability of the APB to sustain limit loads and result in rapid decompression of the fuselage.

During cycle tests of the Boeing 737-800 Fatigue Test Article, cracks were found in the APB web lap splices common to the apex of the pressure dome. The cracks occurred at several of the fastener rows located in the aft web at the lap splice area. The cracks were in the fastener rows located adjacent to the area where the web transitions aft over the forward web in the lap splice. The pull down loading caused by the single rivet located in the areas where each of the webs transitions up 0.032 inches over the adjacent web causes cracks to start on the lap rivet holes. Cracks were found in three of the seven webs. Additional cracks have been found at the single fastener locations between lap splices on 737 classic airplanes.

For Group 2, while performing High Frequency Eddy Current (HFEC) inspections of the APB web lap splice per Service Bulletin 737-53A1353, five cracks common to the gore webs of the center dome apex were found. At one location, the crack was linked from the first to the second fastener row. The current Service Bulletin 737-53A1353 and Maintenance Planning Data (MPD) do not provide adequate inspections for the subject cracks.

Operators should note only affected airplanes line numbers 1 through 1755 have a 0.032 inch web thickness. Airplanes line numbers 1 to 1166 have a different fastener pattern than line numbers 1167 to 1755. The fasteners in the apex dome region are subjected to fuselage pressurization fatigue cycles and clamp-up stresses during the assembly process. Airplanes after line number 1755 have a web thickness 0.040 inch.

Boeing Service Related Problem (SRP) 737NG-SRP-53-0608 is related to this service bulletin.

Boeing Fleet Team Digest (FTD) 737NG FTD 53-19005 is related to this service bulletin.

Revision 01 is sent to add inspections for LN 1167-1755 for cracking that was found at five of seven apex gore webs while performing inspections per SB 737-53A1353. The new LN 1167-1755 will be contained in Group 2 since the apex fastener configuration is different than LN 1-1166 contained in Group 1 of the original release of this SB 737-53-1251. An additional requirement of performing a General Visual Inspection (GVI) for repairs was added to determine the new compliance time for the unrepaired areas. Group 1 and Group 2 both contain new Work Instructions and new Figures for performing GVI. The inspection requirement for the Supplemental Inspection Planning Document (SIPD) is inadequate to find the subject cracking.

Revision 02 is sent to update Group 1 compliance time and for Group 1 removed GVI for any repair.

D. Description

Group 1:

Do a Detailed Inspection and a HFEC Inspection around the web fasteners for any crack. Do a LFEC Inspection around the hidden web lap splice fastener locations for any crack. If no crack is found, continue to do the repeat Detailed Inspection, HFEC Inspection and LFEC Inspection, at the times specified in the compliance section of this service bulletin. If any crack is found, contact The Boeing Company for repair instructions and do the repair.

Group 2:

Get access to the aft side of the Aft Pressure Bulkhead (APB). Do a General Visual Inspection for any repair. If any repair found contact The Boeing Company for alternative inspection(s) to this Service Bulletin, and do the inspection(s) and applicable on-condition action(s). Do a Detailed Inspection and a High Frequency Eddy Current (HFEC) Inspection around the web fasteners for any crack in the unrepaired areas. Do a Low Frequency Eddy Current (LFEC) Inspection around the hidden web lap splice fastener locations for any crack in the unrepaired areas. If no repair is found, do a Detailed inspection, HFEC inspection and LFEC inspection of the Station (STA) 1016 Aft Pressure Bulkhead (APB) center dome apex gore webs including the web edges, lap splices and outside lap splices for any crack. If any crack is found, contact The Boeing Company for repair instructions and do the repair and repeat the Detailed, HFEC, LFEC Inspections of the STA 1016 APB center dome apex gore webs for any crack. If no crack is found, repeat the Detailed, HFEC, LFEC Inspections of the STA 1016 APB center dome apex gore webs for any crack.

Effects of this Revision on airplanes on which Original Issue and Revision 1 was previously done:

None.

The work in this service bulletin is done in the maintenance zone(s) given below.

Affected Maintenance Zones	
Model	Zone
737-600, 737-700, 737-700C, 737-800, 737-900	311, 312

E. Compliance

Federal Aviation Administration (FAA) Airworthiness Directive AD 2005-05-18 is related to this service bulletin. The effective date of AD 2005-05-18 is April 18, 2005.

Federal Aviation Administration (FAA) Airworthiness Directive AD 2013-19-23 is related to this service bulletin. The effective date of AD 2013-19-23 is November 7, 2013.

Federal Aviation Administration (FAA) Airworthiness Directive AD 2017-10-22 is related to this service bulletin. The effective date of AD 2017-10-22 is June 27, 2017.

The Federal Aviation Administration (FAA) will possibly release an additional Airworthiness Directive related to this service bulletin. The Airworthiness Directive will make the compliance tasks and times given in this service bulletin mandatory.

For airplanes which have incorporated Boeing Business Jet (BBJ) Lower Cabin Altitude Supplemental Type Certificate (STC) ST01697SE (6500 feet maximum cabin altitude in lieu of 8000 feet) as referenced in Boeing SB 737-21-1149, the flight cycle related compliance times are different from those specified in this service bulletin. All initial compliance times (thresholds) specified in flight cycles must be reduced to half of those specified in this service bulletin. All repeat interval compliance times specified in flight cycles must be reduced to one-quarter of those specified in this service bulletin.

Do the required actions in accordance with Paragraph 3. Accomplishment Instructions.

When more than one OPTION is given for a CONDITION, do only one of the OPTION numbers. When more than one ACTION is given for a CONDITION or an OPTION, do all of the ACTION numbers for that CONDITION or OPTION.

A logic diagram showing compliance tasks and compliance times is included as an aid in APPENDIX A and APPENDIX B.

Group 1:

Table 1: Inspections of the Aft Side of the Aft Pressure Bulkhead (APB)

Condition	Action	Compliance Time (Whichever Occurs Later)		Repeat Interval (Not to Exceed)
All Airplanes.	Do a Detailed, High Frequency Eddy Current (HFEC) and Low Frequency Eddy Current (LFEC) Inspections of the aft side of the Aft Pressure Bulkhead (APB) for any crack.	Before 26,000 total flight cycles.	Within 4,000 flight cycles after the effective date of AD 2005-05-18.	-

Group 1:**Table 1: Inspections of the Aft Side of the Aft Pressure Bulkhead (APB)**

Condition	Action	Compliance Time (Whichever Occurs Later)	Repeat Interval (Not to Exceed)
CONDITION 1: ANY CRACK FOUND.	CONDITION 1 (ACTION 1): Contact The Boeing Company for repair instructions and do the repair.	Before further flight.	-
	CONDITION 1 (ACTION 2): Repeat the Detailed, High Frequency Eddy Current (HFEC) and Low Frequency Eddy Current (LFEC) Inspections of the aft side of the Aft Pressure Bulkhead (APB) for any crack. (a)	-	4,000 flight cycles.
CONDITION 2: NO CRACK FOUND.	Repeat the Detailed, High Frequency Eddy Current (HFEC) and Low Frequency Eddy Current (LFEC) Inspections of the aft side of the Aft Pressure Bulkhead (APB) for any crack. (a)	-	4,000 flight cycles.
(a) It is not required to do the inspections of the aft side of the Aft Pressure Bulkhead (APB) in areas where a repair covers the affected inspection zones provided:			
1. The repair is the corrective action to the crack condition identified in Service Bulletin 737-53A1251 or in Service Bulletin 737-53A1353 and installed after the original issue date of Service Bulletins 737-53-1251 or 737-53A1353, AND			
2. The installed repair was approved by The Boeing Company Organization Designation Authorization (ODA) via a FAA Form 8100-9.			

Group 2:**Table 2: Inspections of the Aft Side of the Aft Pressure Bulkhead (APB)**

Condition	Action	Compliance Time (Whichever Occurs Later)		Repeat Interval (Not to Exceed)
All Airplanes.	Do a General Visual Inspection of the aft side of the Aft Pressure Bulkhead (APB) for any repair.	Before 23,000 total flight cycles.	Within 4,000 flight cycles after the Revision 1 date of this Service Bulletin.	-

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Group 2:

Table 2: Inspections of the Aft Side of the Aft Pressure Bulkhead (APB)

Condition	Action	Compliance Time (Whichever Occurs Later)		Repeat Interval (Not to Exceed)
CONDITION 3: ANY REPAIR FOUND.	CONDITION 3 (ACTION 1): Contact The Boeing Company for alternative inspection(s) to this Service Bulletin, and do the inspection(s) and applicable on-condition action(s). (a)	Before 23,000 total flight cycles.	Within 4,000 flight cycles after the Revision 1 date of this Service Bulletin.	-
	CONDITION 3 (ACTION 2): Do a Detailed, High Frequency Eddy Current (HFEC) and Low Frequency Eddy Current (LFEC) Inspections of the aft side of the Aft Pressure Bulkhead (APB) for any crack at the unrepaired areas.	Before 23,000 total flight cycles.	Within 4,000 flight cycles after the Revision 1 date of this Service Bulletin.	-
CONDITION 3.1: ANY CRACK FOUND.	CONDITION 3.1 (ACTION 1): Contact The Boeing Company for repair instructions and do the repair.	Before further flight.		-
	CONDITION 3.1 (ACTION 2): Repeat the Detailed, High Frequency Eddy Current (HFEC) and Low Frequency Eddy Current (LFEC) Inspections of the aft side of the Aft Pressure Bulkhead (APB) for any crack at the unrepaired areas. (b)	-		4,000 flight cycles.
CONDITION 3.2: NO CRACK FOUND.	Repeat the Detailed, High Frequency Eddy Current (HFEC) and Low Frequency Eddy Current (LFEC) Inspections of the aft side of the Aft Pressure Bulkhead (APB) for any crack at the unrepaired areas. (b)	-		4,000 flight cycles.

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Group 2:**Table 2: Inspections of the Aft Side of the Aft Pressure Bulkhead (APB)**

Condition	Action	Compliance Time (Whichever Occurs Later)		Repeat Interval (Not to Exceed)
CONDITION 4: NO REPAIR FOUND.	Do a Detailed, High Frequency Eddy Current (HFEC) and Low Frequency Eddy Current (LFEC) Inspections of the aft side of the Aft Pressure Bulkhead (APB) for any crack.	Before 23,000 total flight cycles.	Within 4,000 flight cycles after the Revision 1 date of this Service Bulletin.	-
CONDITION 4.1: ANY CRACK FOUND.	CONDITION 4.1 (ACTION 1): Contact The Boeing Company for repair instructions and do the repair.	Before further flight.		-
	CONDITION 4.1 (ACTION 2): Repeat the Detailed, High Frequency Eddy Current (HFEC) and Low Frequency Eddy Current (LFEC) Inspections of the aft side of the Aft Pressure Bulkhead (APB) for any crack. (b)	-		4,000 flight cycles.
CONDITION 4.2: NO CRACK FOUND.	Repeat the Detailed, High Frequency Eddy Current (HFEC) and Low Frequency Eddy Current (LFEC) Inspections of the aft side of the Aft Pressure Bulkhead (APB) for any crack. (b)	-		4,000 flight cycles.
(a) Condition 3 (Action 1) is not required for any repair found during the General Visual Inspection (GVI) of the aft side of the Aft Pressure Bulkhead (APB) in areas where a repair covers the affected inspection zones provided that the installed repair was approved by The Boeing Company Organization Designation Authorization (ODA) via a FAA Form 8100-9 and inspections are accomplished in accordance with the scheduled repair approval listed on the FAA Form 8100-9.				
(b) It is not required to do the inspections of the aft side of the Aft Pressure Bulkhead (APB) in areas where a repair covers the affected inspection zones provided:				
1. The repair is the corrective action to the crack condition identified in Service Bulletin 737-53A1251 or in Service Bulletin 737-53A1353 and installed after the original issue date of Service Bulletins 737-53-1251 or 737-53A1353, AND				
2. The installed repair was approved by The Boeing Company Organization Designation Authorization (ODA) via a FAA Form 8100-9.				

F. Approval

NOTE: THE APPROVAL STATEMENT THAT FOLLOWS IS VALID FOR ALL AFFECTED AIRPLANES, EXCEPT FOR 737-700C AIRPLANES.

This service bulletin was examined by the Federal Aviation Administration (FAA). The changes specified in this service bulletin comply with the applicable regulations and are FAA approved, as well as European Union Aviation Safety Agency (EASA)/Joint Aviation Authorities (JAA) approved for all EASA/JAA approved airplanes listed in the service bulletin effectivity. This service bulletin and its approval were based on the airplane in its original Boeing delivery configuration or as modified by other approved Boeing changes.

This service bulletin is also approved for airplanes having FAA Aviation Partners Boeing (APB) Supplemental Type Certificate (STC) number ST00830SE installed (not including any areas affected by the split scimitar winglet configuration).

For BBJ models that have APB winglets installed by STC number ST00830SE, the operator is responsible for obtaining appropriate regulatory agency approval before incorporating this service bulletin if the bulletin is in the area affected by blended winglets.

If an airplane has a non-Boeing modification or repair that affects a component or system also affected by this service bulletin, the operator is responsible for obtaining appropriate regulatory agency approval before incorporating this service bulletin.

The Manager of the FAA Seattle ACO Branch approves accomplishment of the applicable inspection program defined in this SB revision as an Alternative Method of Compliance (AMOC) to the inspections required by paragraph (f) of AD 2005-05-18. All provisions of AD 2005-05-18 that are not specifically referenced above remain fully applicable and must be complied with accordingly.

In addition, the Manager of the FAA Seattle ACO Branch approves the incorporation of the applicable inspection program defined in this SB revision as an AMOC, to the incorporation of the corresponding inspections for PSE 53-80-01-3 and 53-80-01-7, required by paragraph (g) of AD 2013-19-23. This AMOC is only applicable after accomplishment of the initial inspections and is limited to the areas inspected. All provisions of AD 2013-19-23 that are not specifically referenced above remain fully applicable and must be complied with accordingly.

In addition, the Manager of the FAA Seattle ACO Branch approves accomplishment of the applicable inspections defined in this SB revision as an AMOC, for the corresponding inspections required by paragraph (g) of AD 2017-10-22. This AMOC is only applicable after accomplishment of the initial inspections and is limited to the areas inspected. All provisions of AD 2017-10-22 that are not specifically referenced above remain fully applicable and must be complied with accordingly.

This Service Bulletin is also approved for airplanes converted into 737-800BCF under project number TS14-0042 that have incorporated Boeing drawing 800A0003 specified in the Type Certification Data Sheet A16WE.

NOTE: THE APPROVAL STATEMENT THAT FOLLOWS IS FOR 737-700C AIRPLANES ONLY.

This service bulletin was examined by the Federal Aviation Administration (FAA). The changes specified in this service bulletin comply with the applicable regulations and are FAA approved for the airplanes listed in the service bulletin effectivity. This service bulletin and its approval were based on the airplane in its original Boeing delivery configuration or as modified by other approved Boeing changes.

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For 737-700C models that have APB winglets installed by STC number ST00830SE, the operator is responsible for obtaining appropriate regulatory agency approval before incorporating this service bulletin if the bulletin is in the area affected by blended winglets.

If an airplane has a non-Boeing modification or repair that affects a component or system also affected by this service bulletin, the operator is responsible for obtaining appropriate regulatory agency approval before incorporating this service bulletin.

The Manager of the FAA Seattle ACO Branch approves accomplishment of the applicable inspection program defined in this SB revision as an Alternative Method of Compliance (AMOC) to the inspections required by paragraph (f) of AD 2005-05-18. All provisions of AD 2005-05-18 that are not specifically referenced above remain fully applicable and must be complied with accordingly.

In addition, the Manager of the FAA Seattle ACO Branch approves the incorporation of the applicable inspection program defined in this SB revision as an AMOC, to the incorporation of the corresponding inspections for PSE 53-80-01-3 and 53-80-01-7, required by paragraph (g) of AD 2013-19-23. This AMOC is only applicable after accomplishment of the initial inspections and is limited to the areas inspected. All provisions of AD 2013-19-23 that are not specifically referenced above remain fully applicable and must be complied with accordingly.

In addition, the Manager of the FAA Seattle ACO Branch approves accomplishment of the applicable inspections defined in this SB revision as an AMOC, for the corresponding inspections required by paragraph (g) of AD 2017-10-22. This AMOC is only applicable after accomplishment of the initial inspections and is limited to the areas inspected. All provisions of AD 2017-10-22 that are not specifically referenced above remain fully applicable and must be complied with accordingly.

G. Manpower

The table below shows an estimate of the task hours necessary to do this change for each airplane. This estimate is for direct labor only, done by an experienced crew. Adjust the estimate with operator task hour data if necessary. The estimate does not include lost time. These are some examples of lost time:

- Time to adjust to the workplace
- Time to schedule the work
- Time to inspect the work
- Time to cure the materials
- Time to make the parts
- Time to find the tools

Group 1:

Task	Number of Persons	Task Hours	Elapsed Hours
Open Access	1	0.25	0.25
FIGURE 1 - Detailed Inspection	1	2.0	2.0
FIGURE 1 - Low Frequency Eddy Current Inspection	2	3.0	1.5
FIGURE 1 - High Frequency Eddy Current Inspection	2	3.0	1.5

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Group 1:

Task	Number of Persons	Task Hours	Elapsed Hours
Close Access	1	0.25	0.25
TOTAL FOR EACH AIRPLANE		8.5	5.5

Group 2:

Task	Number of Persons	Task Hours	Elapsed Hours
Open Access	1	0.25	0.25
FIGURE 3 - General Visual Inspection	1	0.50	0.50
FIGURE 4 - Detailed Inspection	1	2.0	2.0
FIGURE 4 - Low Frequency Eddy Current Inspection	2	3.0	1.5
FIGURE 4 - High Frequency Eddy Current Inspection	2	3.0	1.5
Close Access	1	0.25	0.25
TOTAL FOR EACH AIRPLANE		9.0	6.0

H. Weight and Balance Changes

None.

I. Electrical Load Data

Not changed.

J. References

1. Existing Data:
 - a. Engineering Change Memo PRR 39800-023RS
 - b. Boeing Service Bulletins 737-21-1149, 737-53-1251, 737-53A1353
 - c. Boeing Service Related Problem (SRP) 737NG-SRP-53-0608
 - d. Federal Aviation Administration (FAA) Airworthiness Directives (AD) 2005-05-18, 2013-19-23, 2017-10-22
 - e. Service Bulletin Index D6-19567
 - f. 737 Non-Destructive Testing (NDT) Manual Part 6, 53-10-64
 - g. 737-600/700/800/900 Aircraft Maintenance Manual (AMM) 52-49-11

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- h. Boeing Fleet Team Digest (FTD) 737NG FTD 53-19005
2. Data Supplied with this Service Bulletin:
- None.
3. Installation Drawings Used in the Preparation of this Service Bulletin:

Drawing Number	Title
148A2280	PRESSURE BULKHEAD ASSEMBLY - STA 1016
148A0922	BULKHEAD INTEGRATION INSTALLATION - STA 1016

The table above lists applicable drawings used to prepare this service bulletin. The drawings are not necessary to make the specified changes, and are not supplied with this service bulletin. The drawings may not be applicable to all airplane configurations or operators.

K. Publications Affected

1. Publications:
- None.
2. Damage Tolerance Based Structural Inspections:

Boeing has evaluated the repairs or changes in this service bulletin for effects on Fatigue Critical Structure (FCS) and for changes to Damage Tolerance Inspections (DTI) required in the Maintenance Program. This service bulletin affects FCS. DTI requirements for the structure affected are contained in Paragraph 1.E., Compliance of this service bulletin.

L. Interchangeability and Intermixability of Parts

Accomplishment of this service bulletin does not affect interchangeability or intermixability of parts.

M. Software Accomplishment Summary

Not affected.

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2. MATERIAL INFORMATION**A. Material - Price and Availability**

None.

B. Industry Support Information

Boeing warranty remedies are not available for the configuration changes, Inspection, and repair procedures given in this service bulletin.

C. Parts Necessary for Each Airplane**1. Kits/Parts**

None.

2. Parts and Materials Supplied by the Operator

None.

3. Parts Modified and Reidentified

None.

4. Parts Removed and Not Replaced

None.

D. Parts Necessary to Change Spares

None.

E. Special Tooling - Price and Availability

None.

F. Special Tooling Necessary to do this Service Bulletin

No special tools or equipment are necessary to do the change in this service bulletin. But, maintenance and overhaul tools in the manuals given in Paragraph 1.J., References, can be necessary. Examine operator tool supply to make sure all necessary tools are available.

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3. ACCOMPLISHMENT INSTRUCTIONS

A. GENERAL INFORMATION

- NOTE:**
1. Manual titles are referred to by acronyms. Refer to Paragraph 1.J., References, for definition of the acronyms.
 2. Obey all of the warnings and cautions given in the specified manual sections.
 3. Unless shown differently, these dimensions and tolerances are used:
 - Linear dimensions are in inches
 - Tolerance on linear dimensions, other than rivet and bolt edge margins, is plus or minus 0.03 inch
 - Tolerance on rivet and bolt edge margin is plus or minus 0.05 inch
 - Angular tolerance is plus or minus 2 degrees
 - Hole dimensions for standard solid rivets and fasteners are in Structural Repair Manual (SRM) Chapter 51
 - Torque Values:
 - Values for structural fasteners are given in 737 Structural Repair Manual, Chapter 51.
 - Values for airframe maintenance tasks are included in Chapter 20 of 737 Aircraft Maintenance Manual (AMM).
 - Non-standard torque values for maintenance tasks are included in the applicable installation step.
 4. A Detailed Inspection is defined as: An intensive examination of a specific item, installation, or assembly to detect damage, failure, or irregularity. This could include tactile assessment in which a component or assembly can be checked for tightness/security. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirrors, magnifying lenses, etc. may be necessary. Surface cleaning and elaborate procedures may be required.
 5. A General Visual Inspection is defined as: A visual examination of an interior or exterior area, installation or assembly to detect obvious damage, failure or irregularity. This level of inspection is made from within touching distance unless otherwise specified. A mirror may be necessary to enhance visual access to all exposed surfaces in the inspection area. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight or drop-light and may require removal or opening of access panels or doors. Stands, ladders or platforms may be required to gain proximity to the area being checked. Basic cleaning may be required to ensure appropriate visibility.
 6. These work instructions refer to procedures included in other Boeing documents. When the words "refer to" are used and the operator has an accepted alternative procedure, the accepted alternative procedure can be used. When the words "in accordance with" are included in the instruction, the procedure in the Boeing document must be used.

7. Refer to Appendix A and Appendix B for logic diagram(s). Logic diagrams are provided as an aid only. Information contained in Paragraph 1.E., Compliance is the primary source for compliance times. Information in Paragraph 3.B., Work Instructions is the primary source for tasks required for compliance.
8. The instructions in Paragraph 3.B., Work Instructions and the figures can include operation of tools or test equipment. Boeing Engineering Tool Drawings, the Illustrated Tool and Equipment Manual, and the Special Tool and Ground Handling Drawing Index contain data on versions of the tools or test equipment that you can use. It is permitted to use replaced tools. It is not permitted to use superseded tools.
9. If it is necessary to remove more parts for access, you can remove those parts. If you can get access without removing identified parts, it is not necessary to remove all of the identified parts. Jacking and shoring limitations must be observed.
10. Where the work instructions include installation of a kept part, a new or serviceable part with the same part number can be installed as an alternative to the kept part.
11. If shading is used, shaded areas in Figures are to separate the non-critical and non-authoritative information from the critical and authoritative information.
12. When more than one OPTION is given for a CONDITION, do only one of the OPTION numbers. When more than one ACTION is given for a CONDITION or an OPTION, do all of the ACTION numbers for that CONDITION or OPTION.
13. The compliance times for the actions in Paragraph 3.B., WORK INSTRUCTIONS are in Paragraph 1.E., Compliance.
14. Some steps in the Work Instructions are labeled as Required for Compliance (RC). If this service bulletin is mandated by an Airworthiness Directive (AD), then the steps labeled as RC, including sub-steps under an RC step and any figures identified in an RC step, must be done to comply with the AD. If a step or sub-step is labeled "RC Exempt," then the RC requirement is removed from that step or sub-step. An Alternative Method of Compliance (AMOC) is required for any deviations to RC steps, including sub-steps and identified figures. Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC. This is provided that the RC steps, including sub-steps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

B. WORK INSTRUCTIONS

Group 1:

1. Get access to the aft side of the Aft Pressure Bulkhead (APB) through the section 48 access and blowout access door, refer to 737-600/700/800/900 AMM 52-49-11 as an accepted procedure.
2. Do a Detailed, High Frequency Eddy Current (HFEC) and Low Frequency Eddy Current (LFEC) Inspections of the aft side of the Aft Pressure Bulkhead (APB) for any crack in accordance with FIGURE 1.
 - a. CONDITION 1: ANY CRACK FOUND.

(1) CONDITION 1 (ACTION 1):

- (a) Contact The Boeing Company for repair instructions and do the repair.

(2) CONDITION 1 (ACTION 2):

- (a) Repeat the Detailed, HFEC and LFEC Inspections of the aft side of the Aft Pressure Bulkhead (APB) for any crack in accordance with FIGURE 1.

NOTE: It is not required to do the inspections of the aft side of the Aft Pressure Bulkhead (APB) in areas where a repair covers the affected inspection zones provided:

1. The repair is the corrective action to the crack condition identified in Service Bulletin 737-53A1251 or in Service Bulletin 737-53A1353 and installed after the original issue date of Service Bulletins 737-53-1251 or 737-53A1353, AND
2. The installed repair was approved by The Boeing Company Organization Designation Authorization (ODA) via a FAA Form 8100-9.

b. CONDITION 2: NO CRACK FOUND.

- (1) Repeat the Detailed, High Frequency Eddy Current (HFEC) and Low Frequency Eddy Current (LFEC) Inspections of the aft side of the Aft Pressure Bulkhead (APB) for any crack in accordance with FIGURE 1.

NOTE: It is not required to do the inspections of the aft side of the Aft Pressure Bulkhead (APB) in areas where a repair covers the affected inspection zones provided:

1. The repair is the corrective action to the crack condition identified in Service Bulletin 737-53A1251 or in Service Bulletin 737-53A1353 and installed after the original issue date of Service Bulletins 737-53-1251 or 737-53A1353, AND
2. The installed repair was approved by The Boeing Company Organization Designation Authorization (ODA) via a FAA Form 8100-9.

3. Close the section 48 access and blowout door, refer to 737-600/700/800/900 AMM 52-49-11 as an accepted procedure.
4. Put the airplane back to a serviceable condition.

Group 2:

1. Get access to the aft side of the Aft Pressure Bulkhead (APB) through the section 48 access and blowout access door refer to 737-600/700/800/900 AMM 52-49-11 as an accepted procedure.
2. RC - Do a General Visual Inspection of the aft side of the Aft Pressure Bulkhead (APB) for any repair in accordance with FIGURE 3.

a. CONDITION 3: ANY REPAIR FOUND.

(1) CONDITION 3 (ACTION 1):

- (a) Contact The Boeing Company for alternative inspection(s) to this Service Bulletin, and do the inspection(s) and applicable on-condition action(s).

NOTE: Condition 3 (Action 1) is not required for any repair found during the General Visual Inspection (GVI) of the aft side of the Aft Pressure Bulkhead (APB) in areas where a repair covers the affected inspection zones provided that the installed repair was approved by The Boeing Company Organization Designation Authorization (ODA) via a FAA Form 8100-9 and inspections are accomplished in accordance with the scheduled repair approval listed on the FAA Form 8100-9.

(2) CONDITION 3 (ACTION 2):

- (a) Do a Detailed, High Frequency Eddy Current (HFEC) and Low Frequency Eddy Current (LFEC) Inspections of the aft side of the Aft Pressure Bulkhead (APB) for any crack at the unrepaired areas in accordance with FIGURE 4.

1) CONDITION 3.1: ANY CRACK FOUND.

a) CONDITION 3.1 (ACTION 1):

{1} Contact The Boeing Company for repair instructions and do the repair.

b) CONDITION 3.1 (ACTION 2):

{1} Repeat the Detailed, HFEC and LFEC Inspections of the aft side of the Aft Pressure Bulkhead (APB) for any crack at the unrepaired areas in accordance with FIGURE 4.

NOTE: It is not required to do the inspections of the aft side of the Aft Pressure Bulkhead (APB) in areas where a repair covers the affected inspection zones provided:

1. The repair is the corrective action to the crack condition identified in Service Bulletin 737-53A1251 or in Service Bulletin 737-53A1353 and installed after the original issue date of Service Bulletins 737-53-1251 or 737-53A1353, AND
2. The installed repair was approved by The Boeing Company Organization Designation Authorization (ODA) via a FAA Form 8100-9.

2) CONDITION 3.2: NO CRACK FOUND.

- a) Repeat the Detailed, HFEC and LFEC Inspections of the aft side of the Aft Pressure Bulkhead (APB) at the unrepaired areas in accordance with FIGURE 4.

NOTE: It is not required to do the inspections of the aft side of the Aft Pressure Bulkhead (APB) in areas where a repair covers the affected inspection zones provided:

1. The repair is the corrective action to the crack condition identified in Service Bulletin 737-53A1251 or in Service Bulletin 737-53A1353 and installed after the original issue date of Service Bulletins 737-53-1251 or 737-53A1353, AND
2. The installed repair was approved by The Boeing Company Organization Designation Authorization (ODA) via a FAA Form 8100-9.

b. CONDITION 4: NO REPAIR FOUND.

- (1) Do a Detailed, High Frequency Eddy Current (HFEC) and Low Frequency Eddy Current (LFEC) Inspections of the aft side of the Aft Pressure Bulkhead (APB) for any crack in accordance with FIGURE 4.

(a) CONDITION 4.1: ANY CRACK FOUND.

1) CONDITION 4.1 (ACTION 1):

- a) Contact The Boeing Company for repair instructions and do the repair.

2) CONDITION 4.1 (ACTION 2):

- a) Repeat the Detailed, HFEC and LFEC Inspections of the aft side of the Aft Pressure Bulkhead (APB) for any crack in accordance with FIGURE 4.

NOTE: It is not required to do the inspections of the aft side of the Aft Pressure Bulkhead (APB) in areas where a repair covers the affected inspection zones provided:

1. The repair is the corrective action to the crack condition identified in Service Bulletin 737-53A1251 or in Service Bulletin 737-53A1353 and installed after the original issue date of Service Bulletins 737-53-1251 or 737-53A1353, AND
2. The installed repair was approved by The Boeing Company Organization Designation Authorization (ODA) via a FAA Form 8100-9.

(b) CONDITION 4.2: NO CRACK FOUND.

- 1) Repeat the Detailed, HFEC and LFEC Inspections of the aft side of the Aft Pressure Bulkhead (APB) for any crack in accordance with FIGURE 4.

NOTE: It is not required to do the inspections of the aft side of the Aft Pressure Bulkhead (APB) in areas where a repair covers the affected inspection zones provided:

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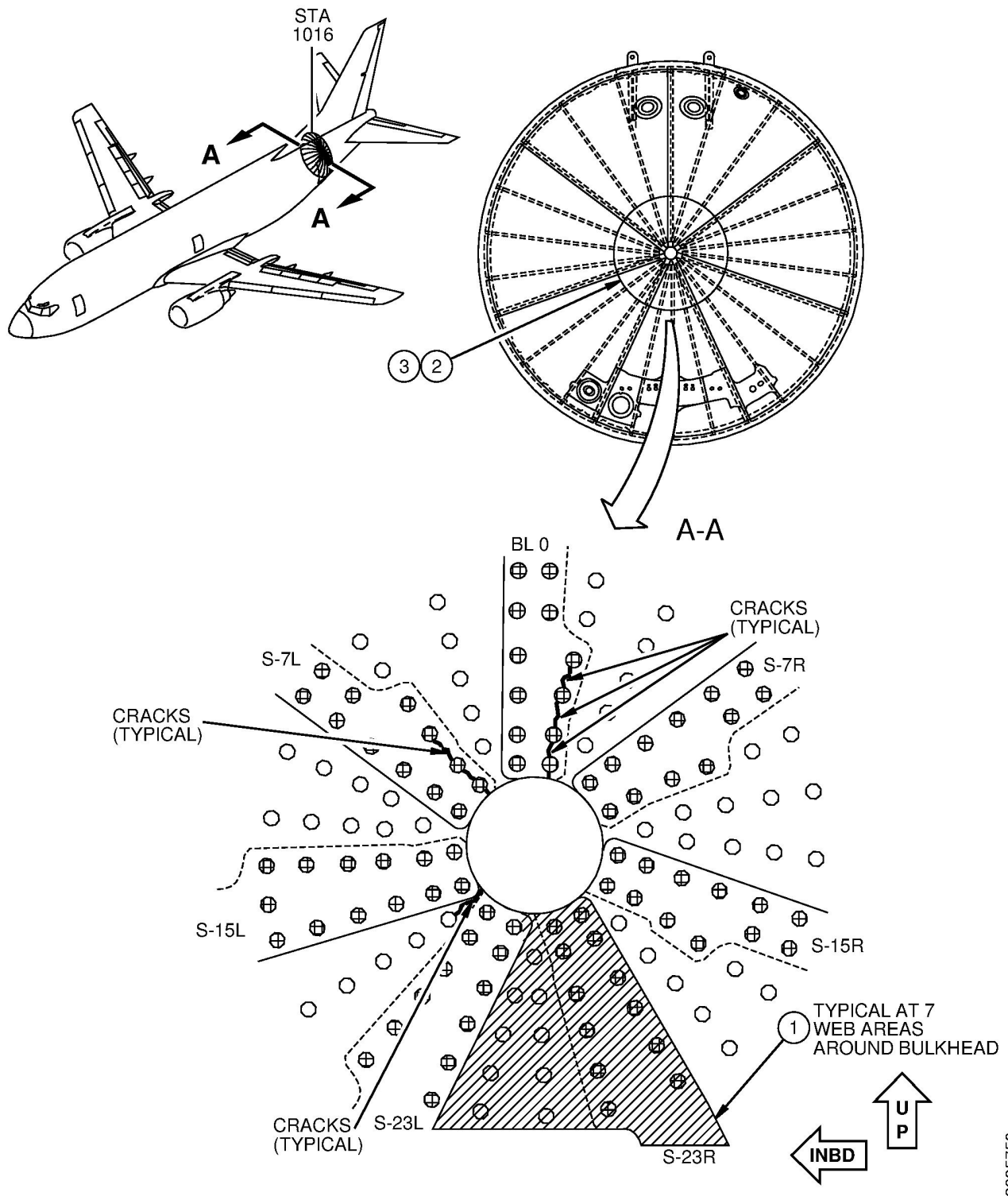
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1. The repair is the corrective action to the crack condition identified in Service Bulletin 737-53A1251 or in Service Bulletin 737-53A1353 and installed after the original issue date of Service Bulletins 737-53-1251 or 737-53A1353, AND
2. The installed repair was approved by The Boeing Company Organization Designation Authorization (ODA) via a FAA Form 8100-9.
3. Close access to the section 48 access and blowout access door refer to 737-600/700/800/900 AMM 52-49-11 as an accepted procedure.
4. Put the airplane back to a serviceable condition.

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This Figure applies only to: Group 1.



**FIGURE 1: AFT PRESSURE BULKHEAD - WEB LAP SPLICE INSPECTION AREAS
(SHEET 1 OF 2)**

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The step numbers shown below agree with the numbers shown in the circle symbols in the figure.

Step	Task	Name	Identification	Qty	More Data
1	Inspect	AFT PRESSURE BULKHEAD WEBS	-	-	(a)
2	Inspect	AFT PRESSURE BULKHEAD WEBS	-	-	(b)
3	Inspect	AFT PRESSURE BULKHEAD WEBS	-	-	(c)
(a) Do a Detailed Inspection on the aft side of the Station (STA) 1016 Aft Pressure Bulkhead (APB) center dome apex gore webs including the web edges, lap splices and outside lap splices for any crack.					
(b) Do a Low Frequency Eddy Current Inspection on the aft side of the Station (STA) 1016 Aft Pressure Bulkhead (APB) for any crack around all hidden web lap splice fasteners in accordance with 737 NDT Manual Part 6, 53-10-64.					
(c) Do a High Frequency Eddy Current Inspection on the aft side of the Station (STA) 1016 Aft Pressure Bulkhead (APB) for any crack around the web fasteners in accordance with 737 NDT Manual Part 6, 53-10-64.					

**FIGURE 1: AFT PRESSURE BULKHEAD - WEB LAP SPLICE INSPECTION AREAS
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**FIGURE 2: THIS FIGURE IS DELETED AT REVISION 2
(SHEET 1 OF 1)**

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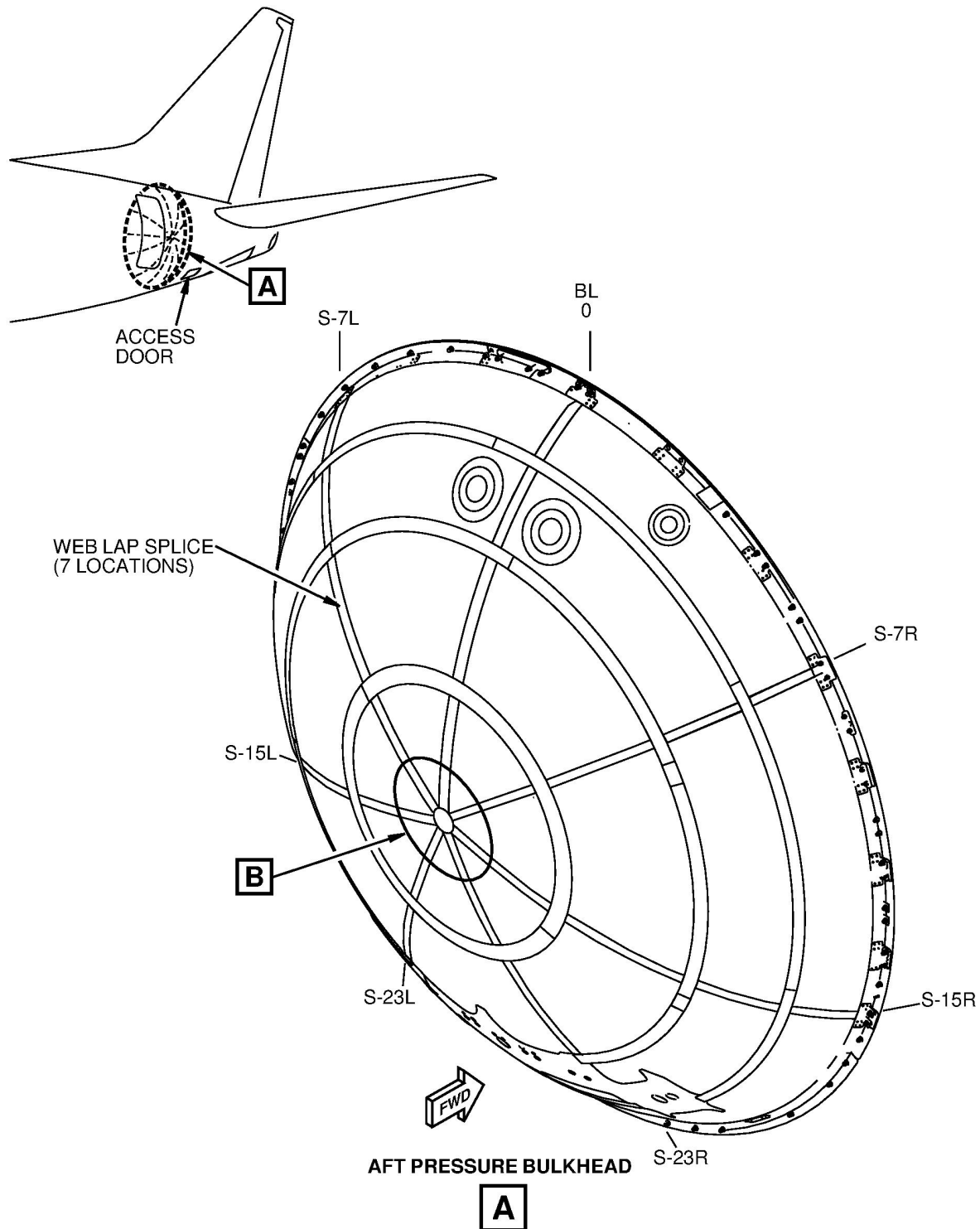
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This Figure applies only to: Group 2.



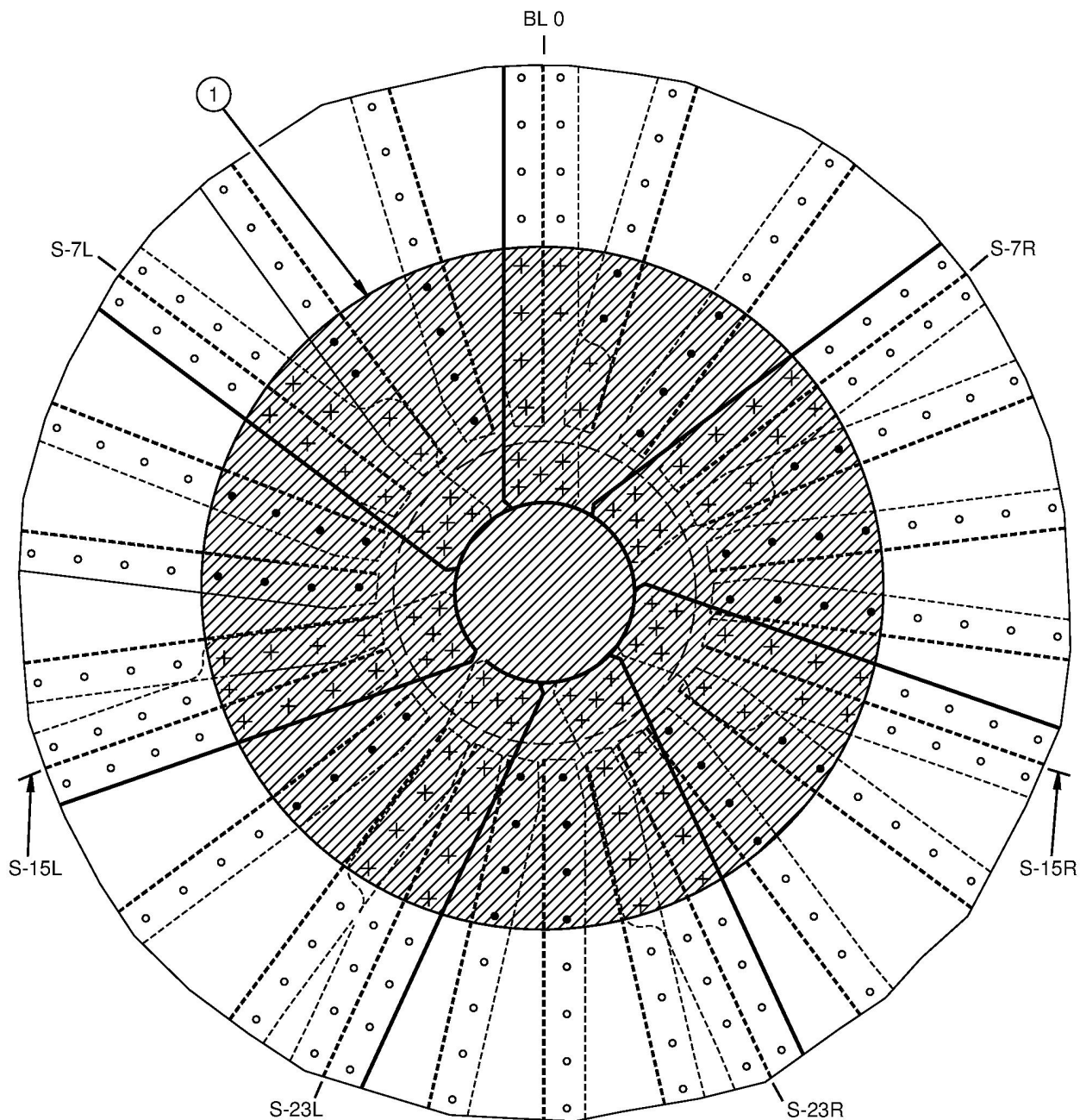
**FIGURE 3: AFT PRESSURE BULKHEAD - GENERAL VISUAL INSPECTION
(SHEET 1 OF 3)**

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 GENERAL VISUAL INSPECTION

AFT PRESSURE BULKHEAD
VIEW LOOKING FORWARD

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**FIGURE 3: AFT PRESSURE BULKHEAD - GENERAL VISUAL INSPECTION
(SHEET 2 OF 3)**

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BOEING SERVICE BULLETIN 737-53A1251**ALERT****ALERT**

The step numbers shown below agree with the numbers shown in the circle symbols in the figure.

Step	Task	Name	Identification	Qty	More Data
1	Inspect	AFT PRESSURE BULKHEAD WEBS	-	-	(a)
(a) Do a General Visual Inspection of the aft side of the Station (STA) 1016 Aft Pressure Bulkhead (APB) for any repair.					

**FIGURE 3: AFT PRESSURE BULKHEAD - GENERAL VISUAL INSPECTION
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This Figure applies only to: Group 2.

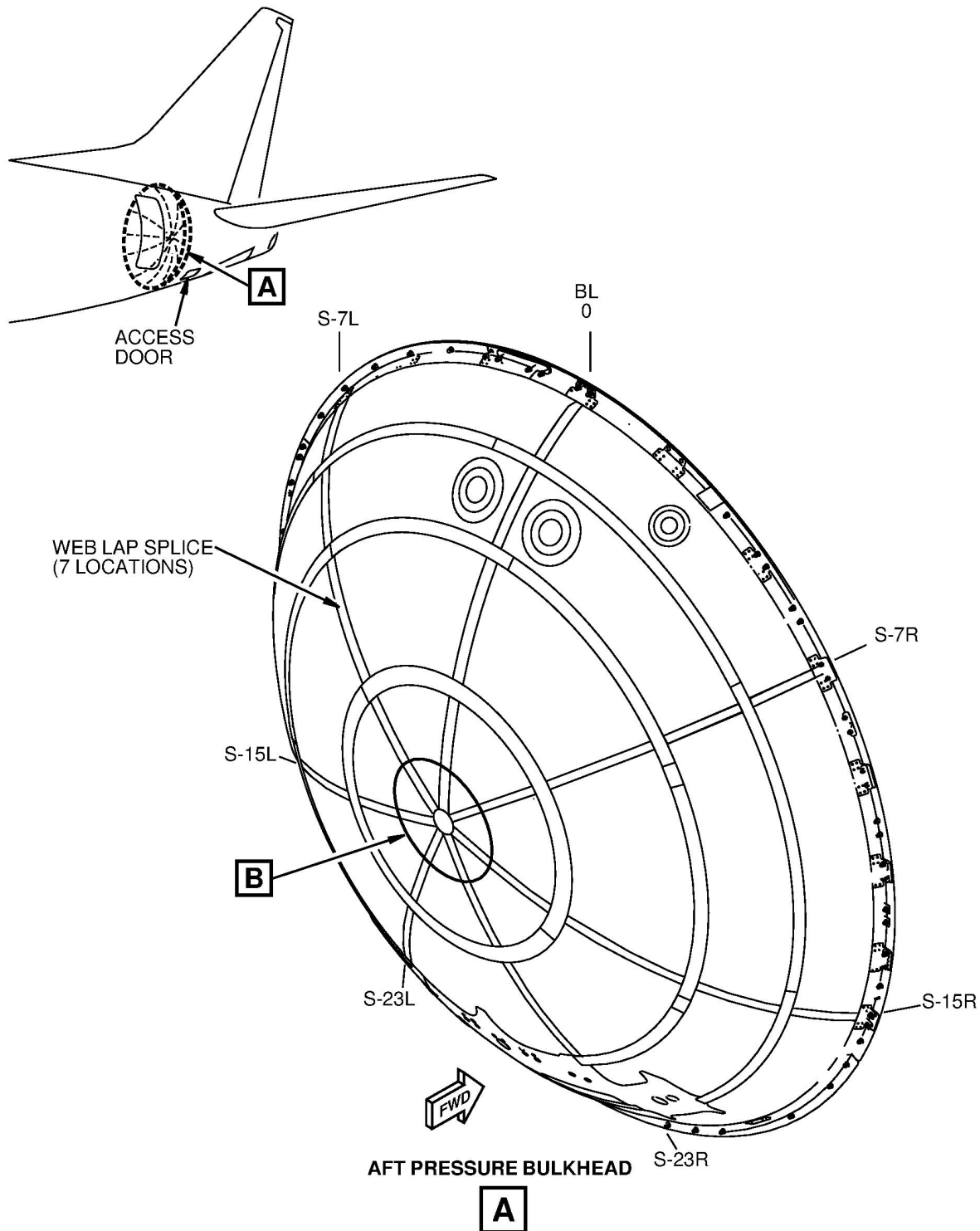


FIGURE 4: AFT PRESSURE BULKHEAD - WEB LAP SPLICE INSPECTION AREAS
(SHEET 1 OF 3)

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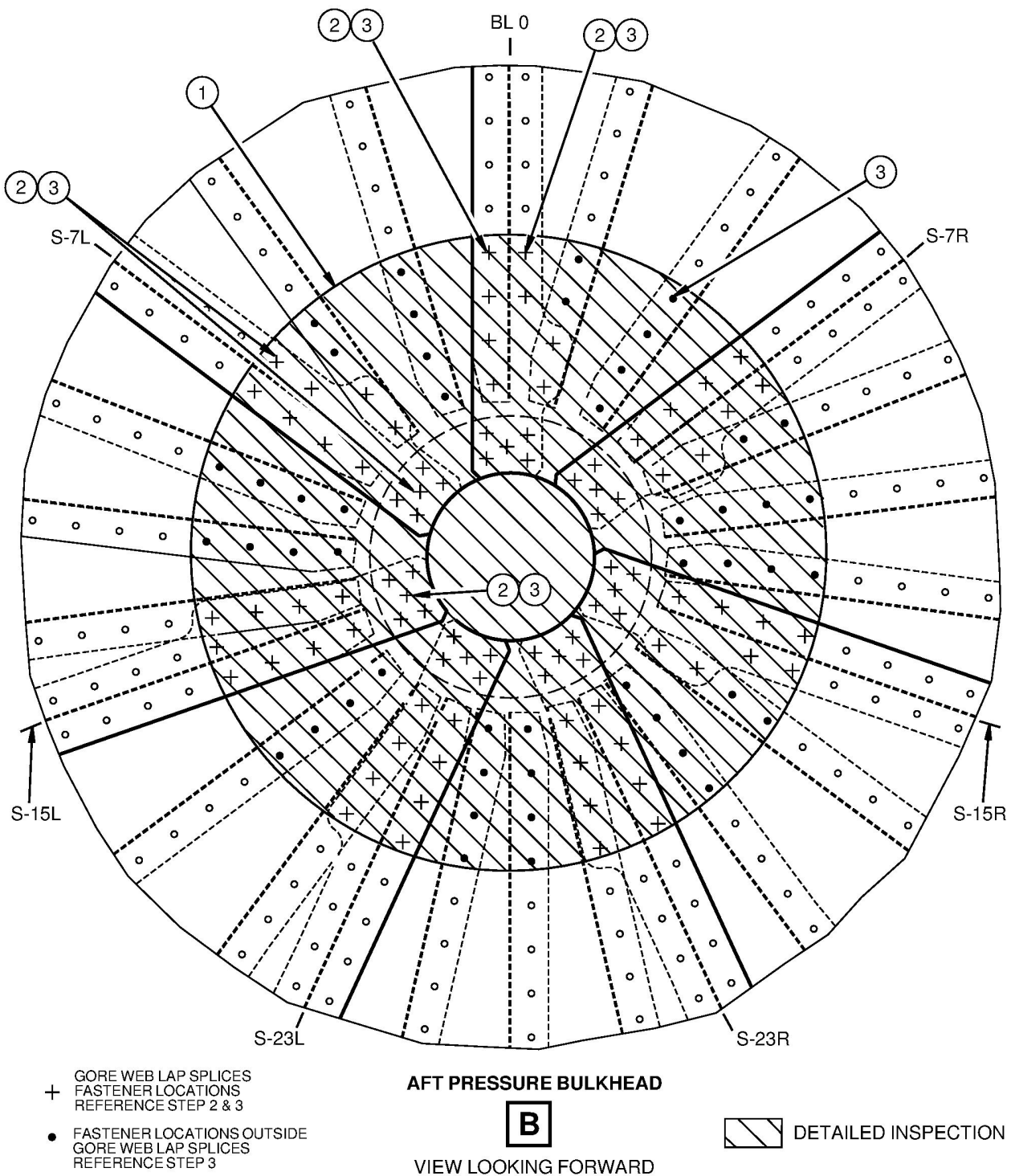
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**FIGURE 4: AFT PRESSURE BULKHEAD - WEB LAP SPLICE INSPECTION AREAS
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The step numbers shown below agree with the numbers shown in the circle symbols in the figure.

Step	Task	Name	Identification	Qty	More Data
1	Inspect	AFT PRESSURE BULKHEAD WEBS	-	-	(a)
2	Inspect	AFT PRESSURE BULKHEAD WEBS	-	-	(b)
3	Inspect	AFT PRESSURE BULKHEAD WEBS	-	-	(c)
(a) Do a Detailed Inspection on the aft side of the Station (STA) 1016 Aft Pressure Bulkhead (APB) center dome apex gore webs including the web edges, lap splices and outside lap splices for any crack.					
(b) Do a Low Frequency Eddy Current Inspection on the aft side of the Station (STA) 1016 Aft Pressure Bulkhead (APB) for any crack around all hidden web lap splice fasteners in accordance with 737 NDT Manual Part 6, 53-10-64.					
(c) Do a High Frequency Eddy Current Inspection on the aft side of the Station (STA) 1016 Aft Pressure Bulkhead (APB) for any crack around the web fasteners in accordance with 737 NDT Manual Part 6, 53-10-64.					

**FIGURE 4: AFT PRESSURE BULKHEAD - WEB LAP SPLICE INSPECTION AREAS
(SHEET 3 OF 3)**

This Appendix applies only to: Group 1.

Logic diagrams are provided as an aid only. Information contained in Paragraph 1.E., Compliance is the primary source for compliance times. Information contained in Paragraph 3.B., Work Instructions is the primary source for tasks required for compliance.

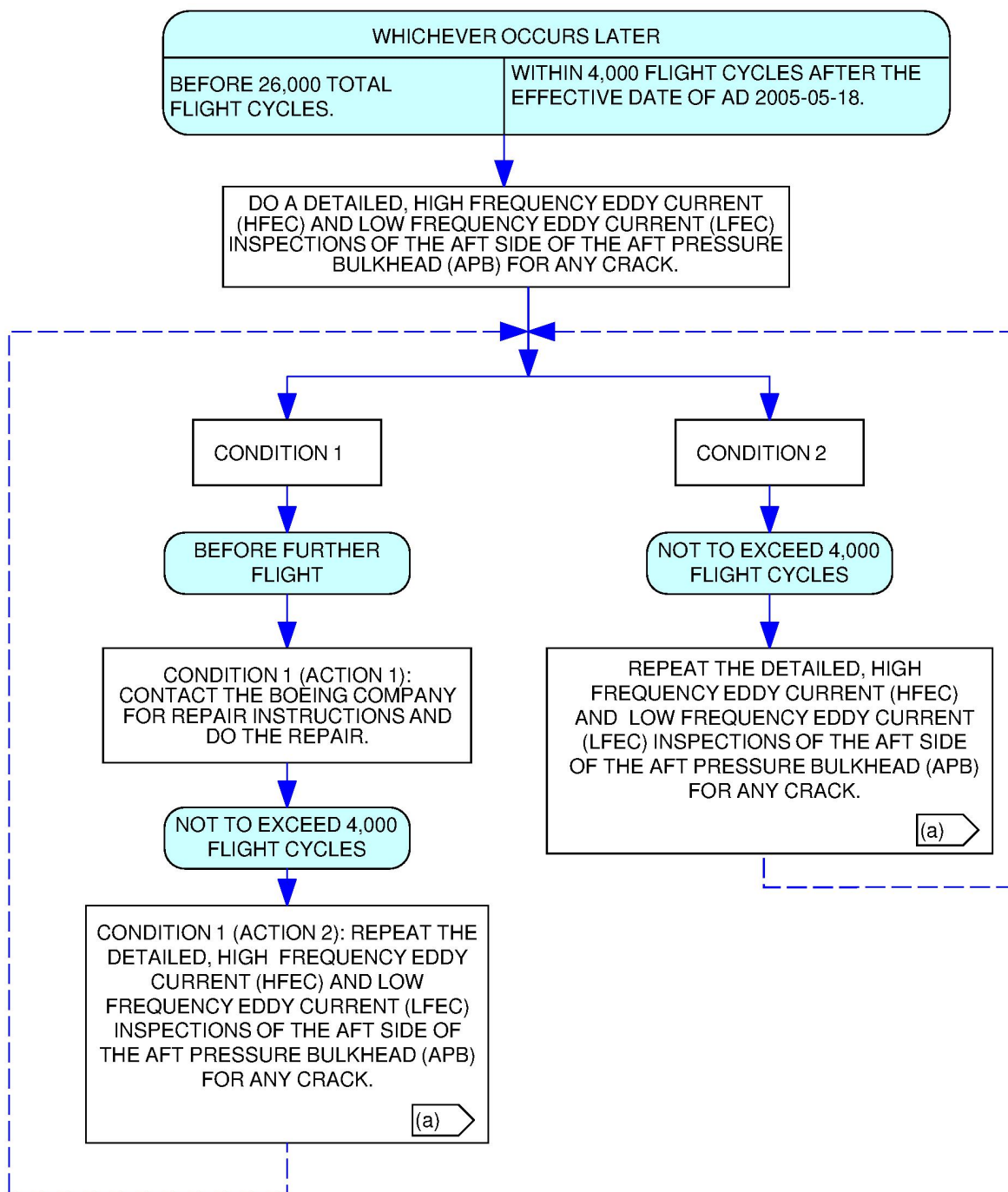
1. The table below gives the description for the parts and conditions called out in the logic diagrams.

Title	Description
CONDITION 1	ANY CRACK FOUND.
CONDITION 2	NO CRACK FOUND.

2. The table below gives the description for the flag notes called out in the logic diagram.

Flag Note Letter	Description
(a)	<p>It is not required to do the inspections of the aft side of the Aft Pressure Bulkhead (APB) in areas where a repair covers the affected inspection zones provided:</p> <ol style="list-style-type: none">1. The repair is the corrective action to the crack condition identified in Service Bulletin 737-53A1251 or in Service Bulletin 737-53A1353 and installed after the original issue date of Service Bulletins 737-53-1251 or 737-53A1353, AND2. The installed repair was approved by The Boeing Company Organization Designation Authorization (ODA) via a FAA Form 8100-9.

APPENDIX A: LOGIC DIAGRAM FOR PARAGRAPH 1.E., COMPLIANCE, TABLE 1: INSPECTION OF AFT PRESSURE BULKHEAD CENTER DOME APEX GORE WEBS
(SHEET 1 OF 2)



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APPENDIX A: LOGIC DIAGRAM FOR PARAGRAPH 1.E., COMPLIANCE, TABLE 1: INSPECTION OF AFT PRESSURE BULKHEAD CENTER DOME APEX GORE WEBS
(SHEET 2 OF 2)

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This Appendix applies only to: Group 2.

Logic diagrams are provided as an aid only. Information contained in Paragraph 1.E., Compliance is the primary source for compliance times. Information contained in Paragraph 3.B., Work Instructions is the primary source for tasks required for compliance.

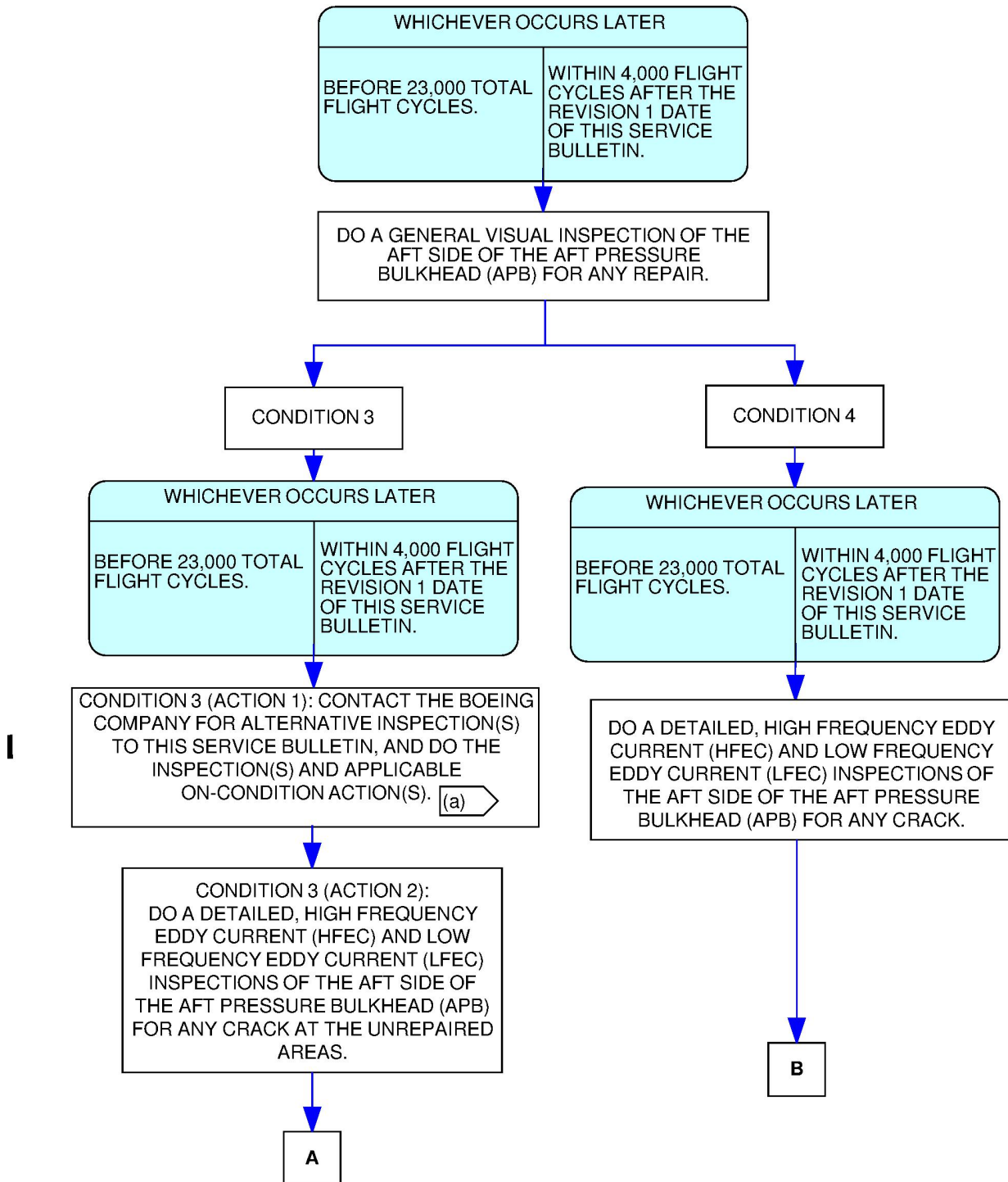
1. The table below gives the description for the parts and conditions called out in the logic diagrams.

Title	Description
CONDITION 3	ANY REPAIR FOUND.
CONDITION 3.1	ANY CRACK FOUND.
CONDITION 3.2	NO CRACK FOUND.
CONDITION 4	NO REPAIR FOUND.
CONDITION 4.1	ANY CRACK FOUND.
CONDITION 4.2	NO CRACK FOUND.

2. The table below gives the description for the flag notes called out in the logic diagram.

Flag Note Letter	Description
(a)	Condition 3 (Action 1) is not required for any repair found during the General Visual Inspection (GVI) of the aft side of the Aft Pressure Bulkhead (APB) in areas where a repair covers the affected inspection zones provided that the installed repair was approved by The Boeing Company Organization Designation Authorization (ODA) via a FAA Form 8100-9 and inspections are accomplished in accordance with the scheduled repair approval listed on the FAA Form 8100-9.
(b)	<p>It is not required to do the inspections of the aft side of the Aft Pressure Bulkhead (APB) in areas where a repair covers the affected inspection zones provided:</p> <ol style="list-style-type: none"> 1. The repair is the corrective action to the crack condition identified in Service Bulletin 737-53A1251 or in Service Bulletin 737-53A1353 and installed after the original issue date of Service Bulletins 737-53-1251 or 737-53A1353, AND 2. The installed repair was approved by The Boeing Company Organization Designation Authorization (ODA) via a FAA Form 8100-9.

APPENDIX B: LOGIC DIAGRAM FOR PARAGRAPH 1.E., COMPLIANCE, TABLE 2: INSPECTION OF AFT PRESSURE BULKHEAD CENTER DOME APEX GORE WEBS
(SHEET 1 OF 4)



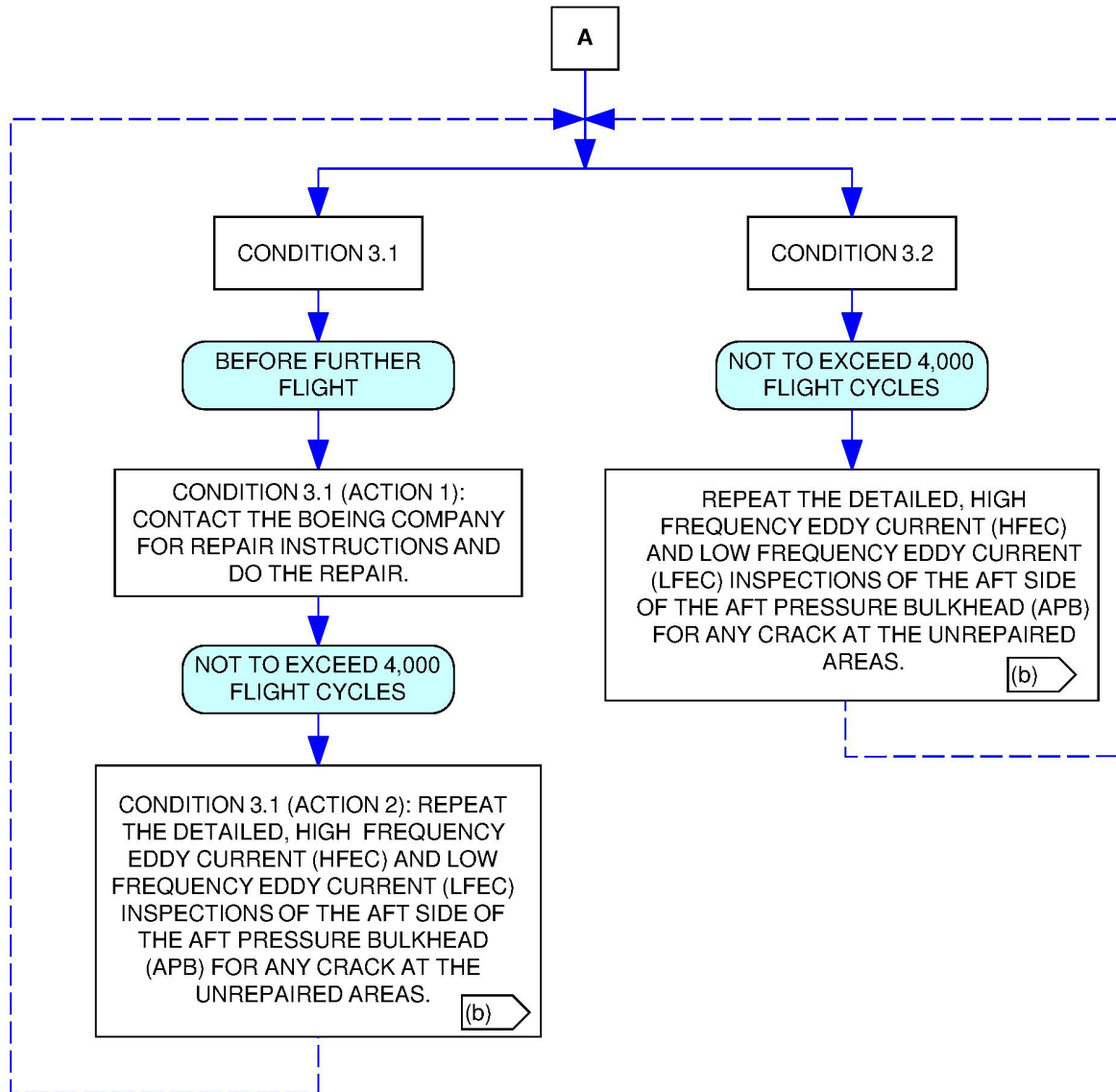
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APPENDIX B: LOGIC DIAGRAM FOR PARAGRAPH 1.E., COMPLIANCE, TABLE 2: INSPECTION OF AFT PRESSURE BULKHEAD CENTER DOME APEX GORE WEBS
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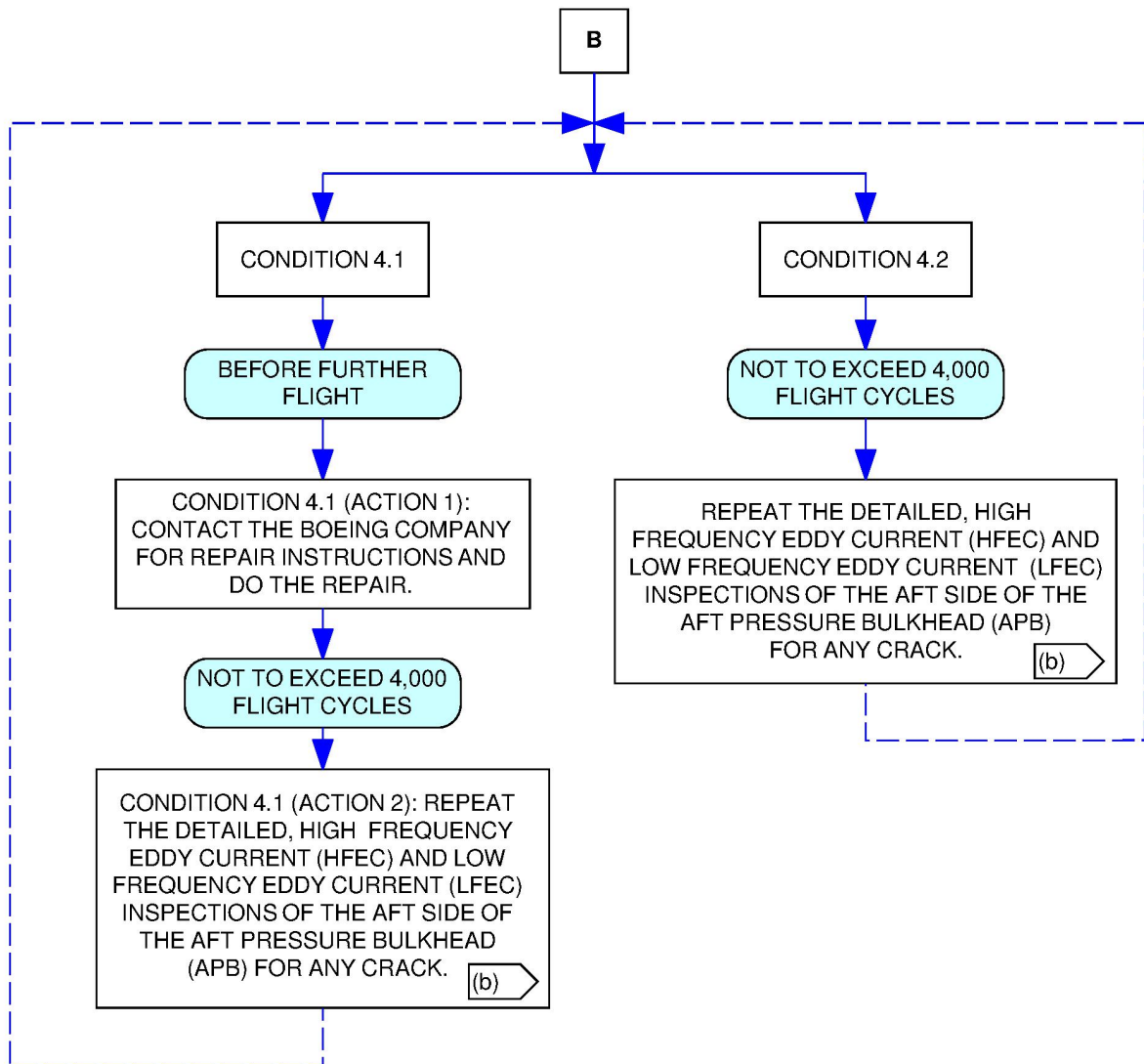
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APPENDIX B: LOGIC DIAGRAM FOR PARAGRAPH 1.E., COMPLIANCE, TABLE 2: INSPECTION OF AFT PRESSURE BULKHEAD CENTER DOME APEX GORE WEBS
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APPENDIX B: LOGIC DIAGRAM FOR PARAGRAPH 1.E., COMPLIANCE, TABLE 2: INSPECTION OF AFT PRESSURE BULKHEAD CENTER DOME APEX GORE WEBS
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